

Equation 4.2.1-6

$$\dot{Q}_h(T_j) = \begin{cases} \dot{Q}_h(17) + \frac{[\dot{Q}_h(47) - \dot{Q}_h(17)] * (T_j - 17)}{47 - 17}, & \text{if } T_j \geq 45^{\circ}\text{F} \\ \dot{Q}_h(17) + \frac{[\dot{Q}_h(35) - \dot{Q}_h(17)] * (T_j - 17)}{35 - 17}, & \text{if } 17^{\circ}\text{F} \leq T_j < 45^{\circ}\text{F} \\ \dot{Q}_h(5) + \frac{[\dot{Q}_h(17) - \dot{Q}_h(5)] * (T_j - 5)}{17 - 5}, & \text{if } T_j < 17^{\circ}\text{F} \end{cases}$$